

## Scenario Worksheet

## Practice and Scenario Description:

Information Type	Data
Region	Delta States
State	Louisiana
Discipline Group	Agronomy
Practice Code/Name	346 - Residue and Tillage Management - Ridge Till
Scenario ID	3
Scenario Name	Ridge Till - Sugarcane Sweep or Disk Beds
Scenario Description	In this scenario, sugarcane producers will be migrating from a system of burning residue immediately after harvest in the fall and winter to a system that allows residue to remain on the soil surface until early spring. Residue must be left in the field, and on the tops of ridges, throughout the winter. In the spring, usually sometime in March, residue from the ridge tops will be swept into the furrows. No burning will take place. Keeping the rows covered during the winter months will significantly improve soil quality and reduce erosion. Some loss of yield is expected, however, due to the cooling effects of the residue cover in the spring.
Before Practice Situation	Sugarcane residue is typically burned immediately after harvest in the fall and early winter. Residue amounts after burning operations average less than 30%, resulting in bare soil being exposed to intense rainfall during the fall, winter, and early spring. Any crop residue that is present degrades and sediment/nutrient runoff from fields increases during rainfall events. Sheet and rill erosion occurs with visible signs of soil erosion by spring. Soil health (soil organic matter) declines over time as a result of burning. This system will typically have a negative or low Soil Conditioning Index (SCI).
After Practice Situation	All residues are to be maintained on the soil surface in a uniform distribution over the entire field and not burned or removed until after February 15 of each spring. Sometime in March, after off-bar disking, ridge tops will be swept, placing residue in the row furrows. Crop residues provide soil surface cover throughout the winter. Runoff and erosion are reduced and no rills are visible on the soil surface. Over time, soil health is improved due to the additional crop residues, ground cover, and soil infiltration. This practice will require reducing soil erosion below T and maintain a positive SCI for the entire rotation.
Scenario Feature Measure	
Scenario Unit	Acre
Scenario Typical Size	60

## Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$773.40	\$12.89
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$1,411.14	\$23.52
Total	\$2,184.54	\$36.41

## Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	1231	Ridge Till Row Cultivator	Includes equipment, power unit and labor costs.	Acre	\$12.89	60	\$773.40
Foregone Income	2078	FI, Sugarcane 5 year rotation	Sugarcane is Primary Crop	Acre	\$470.38	3	\$1,411.14